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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,653	09/26/2005	Martin G Selbrede	25438-P009WOUS	4786

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EXAMINER

TRA, TUYEN Q

ART UNIT	PAPER NUMBER
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2873

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/506,653	Applicant(s) SELBREDE, MARTIN G	
	Examiner Tuyen Q. Tra	Art Unit 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>0904 and 1205</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Oath/Declaration

1. The declaration filed 09/03/2004 is acceptable.

Drawings

2. The drawings filed on 09/03/2004 in this application are accepted.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewiner et al. (U.S. Pat. 5,878,066 A).

- a) With respect to claim 1, Lewiner et al. discloses Control devices of the relay type in Figure 1 comprising of a first electret layer (Figure 1, item 4) having an electrical charge; a first conductive layer (Figure 1, item 2) residing on the first electret layer (4); a

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moveable second electret layer (Figure 1, item 5), wherein the second electret layer (5) is in a spaced apart relation to the first conductive layer (4) in a quiescent state; a second conductive layer (Figure 1, item 1) in a spaced apart relation to the second electret layer (5) in the quiescent state; and a voltage source (Figure 1, item 10) configured to selectively apply a voltage between the first conductive layer (2) and the second conductive layer (1) (column 2, lines 10-43).

b) With respect to claim 2, Lewiner et al. further discloses wherein the voltage applied between the first and the second conductive layer (2, 1) results in propelling the second electret layer (5) to one of the first and the second conductive layers (2, 1).

c) With respect to claim 3, Lewiner et al. further discloses wherein the second electret layer (5) has an electric charge (+) of a same polarity as the electric charge (+) of the first electret layer (4), wherein the second electret layer (5) is operable for propelling toward the first electret layer (4) in response to the voltage source (10) applying a charge having an opposite polarity of the polarity of the charge of the first electret layer (4) to the first conductive layer (2).

d) With respect to claim 4, Lewiner et al. further discloses wherein second electret layer (5) has an electric charge of a same polarity as the electric charge of the first electret layer (4), wherein the second electret layer (5) is operable for propelling toward the second conductive layer (1) in response to the voltage source (10) applying a charge having an opposite polarity of the polarity of the charge of the first electret layer (5) to the second conductive layer (1).

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- e) With respect to claim 5, Lewiner et al. further discloses wherein upon equalizing a potential difference between the first and the second conductive layers (2, 1) the second electret (5) returns to its quiescent state.
- f) With respect to claims 6 and 7, Lewiner et al. further discloses wherein the first and the second electret layers(4, 5)comprise mono-charged electrets; wherein the first and the second electret layers (4, 5) comprise polarized electrets.
- g) With respect to claims 8 and 9, Lewiner et al. further discloses wherein the first electret layer (4) comprises polarized electrets; wherein the second electret layer (5) comprises polarized electrets.
- h) With respect to claims 10 and 11, Lewiner et al. further discloses wherein the second electret layer (5) undergoes deformation as a result of the voltage source (10) selectively applying the voltage between the first and the second conductive layers (1, 2); wherein the second electret layer (5) is restored to an undeformed state upon equalizing a potential difference between the first and the second conductive layers (2, 1).
- k) With respect to claims 12 and 13, Lewiner et al. further discloses wherein frustration of total internal reflection of light occurs by means of the second electret layer (5); wherein a low refractive index gap between dielectric materials associated with the first and the second electret layers (4, 5) alternates between distances larger and smaller than one wavelength of light as a function of a potential difference selectively applied between the first and the second conductive layers (2, 1) thereby providing

means to frustrate the total internal reflection of light and allow light to leap the gap into the second electret layer (5).

6. Claims 14-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewiner et al. (US Patent 4,078,183 A).

a) With respect to claim 14, Lewiner et al. discloses control devices of the relay type in Figure 3 and 14 comprising of a first conductive layer (Figure 14, item 1h); a moveable second electret layer (Figure 14, item 3h), wherein the electret layer (3h) is in a spaced apart relation to the first conductive layer (1h) in a quiescent state; a second conductive layer (Figure 14, item 2h) in a spaced apart relation to the second electret layer (3h) in the quiescent state; and a voltage source (Figure 3, item S) configured to selectively apply a voltage between the first conductive layer (1h) and the second conductive layer (2h) (column 3, line 45 - column 4, line 31).

b) With respect to claims 15 and 16, Lewiner et al. further discloses wherein said voltage (Figure 3, item S) applied between said first and said second conductive layers (1h, 2h) results in propelling said electret layer (3h) to one of said first and said second conductive layers (1h, 2h); wherein said electret layer (3h) is operable for propelling toward said first conductive layer (1h) in response to said voltage source (S) applying a charge having an opposite polarity of a polarity of a charge of said electret layer (3h) to said first conductive layer (1h).

c) With respect to claim 17 and 18, Lewiner et al. further discloses wherein said electret layer (3h) is operable for propelling toward said second conductive layer (2h) in response to said voltage source (S) applying a charge having an opposite polarity of a

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polarity of a charge of said electret layer (3h) to said second conductive layer (2h); wherein upon equalizing a potential difference between said first and said second conductive layers (1h, 2h) said electret layer (3h) returns to its quiescent state.

d) With respect to claim 19 - 21, Lewiner et al. further discloses wherein said electret layer (3h) comprises mono-charged electrets; wherein said electret layer (3h) undergoes deformation as a result of said voltage source (S) selectively applying said voltage between said first and said second conductive layers (1h, 2h); wherein said electret layer (3h) is restored to an undeformed state upon equalizing a potential difference between said first and said second conductive layers (1h, 2h).

e) With respect to claim 22 and 23, Lewiner et al. further discloses wherein frustration of total internal reflection of light occurs by means of said electret layer (3h); wherein a low refractive index gap between dielectric materials associated with said first conductive layer (1h, 2h) and said electret layer (3h) alternates between distances larger and smaller than one wavelength of light as a function of a potential difference selectively applied between said first and said second conductive layers (1h, 2h) thereby providing means to frustrate said total internal reflection of light and allow light to leap said gap into said electret layer (3h).

Conclusion

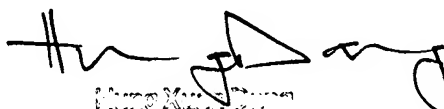
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuyen Q. Tra whose telephone number is 571-272-2343. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky L. Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TT

August 26, 2006



Ricky L. Mack
Supervisor